DISTRIBUTED NARRATIVE EXTRACTION USING IMAGING SENSOR NETWORKS

AT HOME. REYNA'S STORY BEGINS.

SHE SETS UP THE STORY MODEL.

SHE CAN SELECT FROM THE AVAILABLE STORIES AND DOWNLOAD NEW ONES FROM THE WEB.
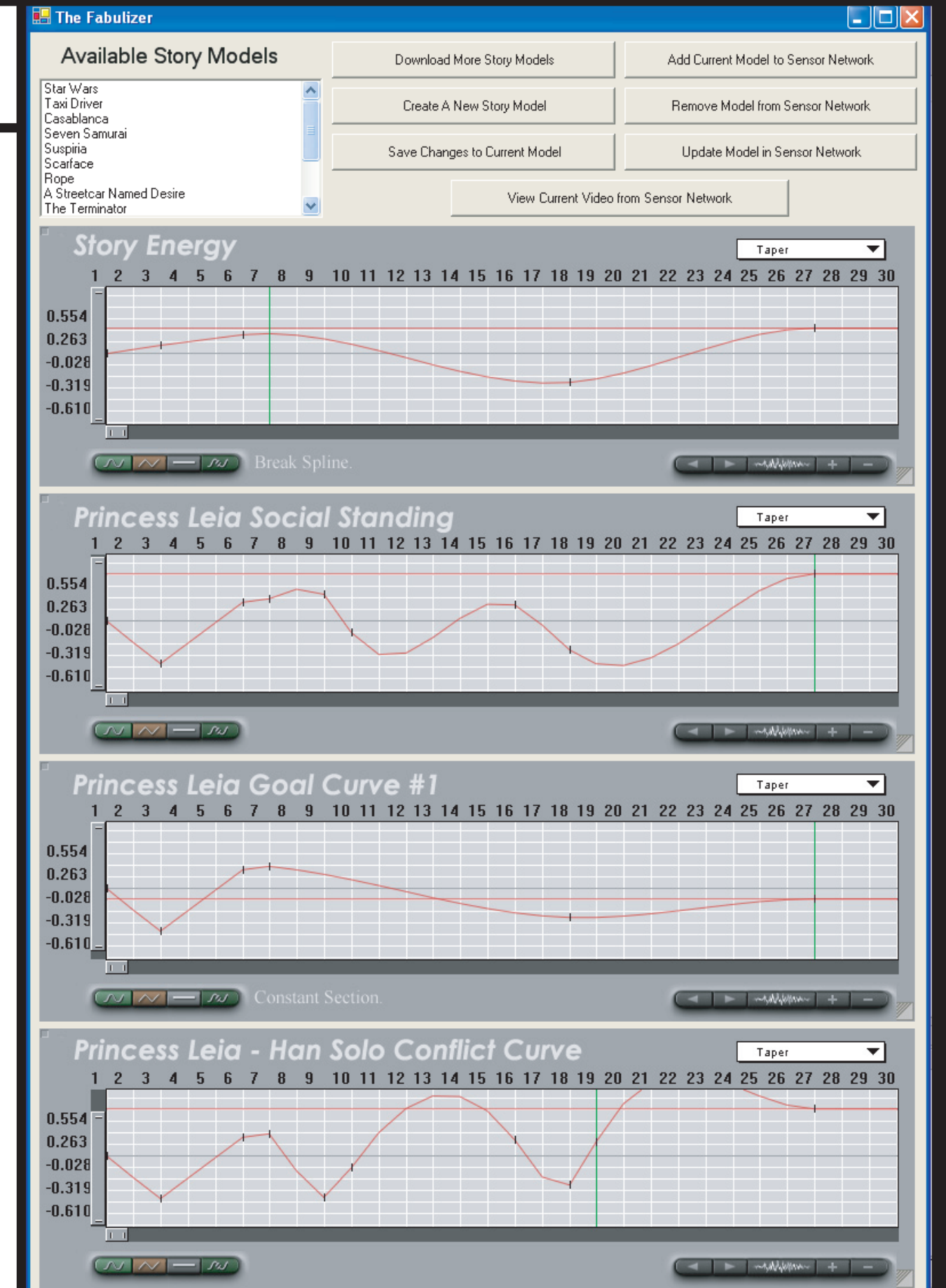
OR

SHE CAN CREATE A NEW STORY MODEL FROM SCRATCH AND SHARE IT.

THE STORY MODEL CONTAINS HUNDREDS OF PARAMETERS THAT DESCRIBE THE STORY.

SHE CAN CREATE OR MODIFY ALL OF THESE PARAMETERS.

THE STORY MODEL IS SENT TO THE IMAGING SENSOR NETWORK.

IMAGING SENSOR NODE (ISN).

PROPRIETARY SENSOR RF WIRELESS (500 KBPS)

SEAGATE 8GB 1" HDD

ALPS CMOS CAMERA

FREESCALE I.MX21 VIDEO PROCESSOR

NARRATIVE SENSOR NODE INCLUDED

802.11 FOR VIDEO RETRIEVAL

GPS

AT WORK...

ISN

NSN

AT PLAY...

ISN

ISN

NSN

NSN
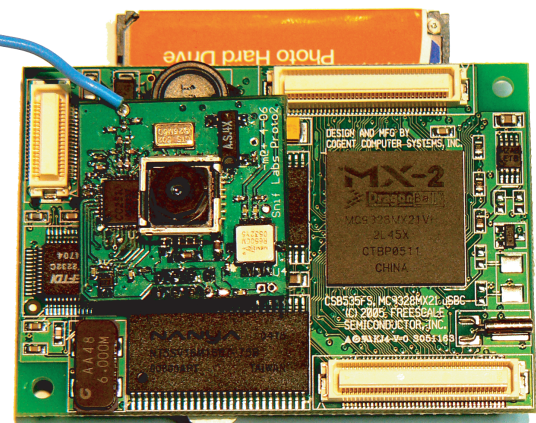
## NARRATIVE SENSOR NODE (NSN).

WEARABLE! MOBILE! OR STATIONARY!

DETECTS PARAMETERS FROM THE STORY MODEL

PROPRIETARY SENSOR RF WIRELESS (500 KBPS)

IDENTIFIES WEARER TO THE IMAGING SENSORS

DETERMINES IF THE CURRENT SITUATION FITS THE MODEL, HOW WELL IT FITS, AND WHERE IN THE STORY IT FITS

COORDINATES WITH IMAGING SENSORS TO CAPTURE STORY EVENTS

GETS LOCATION FROM IMAGING SENSOR NODES
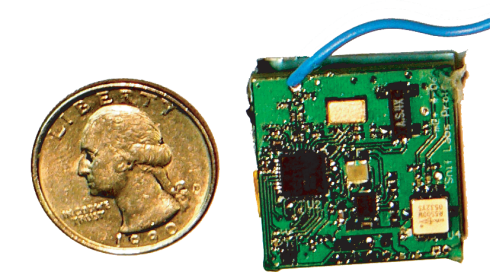
THE SHOW GOES ON...

THE VIDEO CLIPS ARE COLLECTED AND SEQUENCED ACCORDING TO THE ORIGINAL STORY MODEL.

EACH DAY REYNA CAN CHECK THE VIDEO AS MORE AND MORE CLIPS ARE ADDED AND THE VIDEO BETTER FITS THE EBBS AND FLOWS OF THE ORIGINAL STORY.

THE FINAL VIDEO FOLLOWS THE PARAMETRIC MODEL OF THE ORIGINAL STORY BUT HAS THE PERSONALITY OF THE EVENTS AND RELATIONSHIPS OF REYNA'S LIFE.

SHOWTIME...

WHY DOES SHE DO IT?

NEW PERSPECTIVE ON THE EVERYDAY HELPS UNDERSTAND OUR EXPERIENCES

USERS CAN TRADE VIDEOS AND STORY MODELS, BUILDING A COMMUNITY

THIS IS A NEW FORM OF DIARY/BLOG

MULTIPLE USERS CAN USE THE SAME MODEL AND SEE HOW THEIR VIDEOS DIFFER

NARRATIVE STRUCTURES ARE USED AS A MEANS FOR CATALOGING LARGE AMOUNTS OF VIDEO AND SENSOR DATA

MAT LAIBOWITZ
RESPONSIVE ENVIRONMENTS GROUP
MIT MEDIA LAB 2006